

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/015,846	12/10/2001	Jesus-Manuel Duque-Anton	DE 000227	3607	
24737 759	90 01/26/2005		EXAMINER		
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			REILLY, SEAN M		
P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER	
Diminobili			2153		
				DATE MAILED: 01/26/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.	Applicant(s)			
			10/015,846	DUQUE-ANTON ET AL.			
	Οπις	Action Summary	Examiner	Art Unit			
			Sean Reilly	2153			
The MAILING DATE of this communication appears n the c ver sheet with the c rrespondence address Peri df r Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status				~ .			
1)🖂	Responsi	ve to communication(s) filed on <u>10 De</u>	<u>cember 2001</u> .				
2a) <u></u> □	This action is FINAL . 2b)⊠ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) 🛛	4)⊠ Claim(s) <u>1-6</u> is/are pending in the application.						
-	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	5) Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>1-6</u> is/are rejected.						
7)	Claim(s)_	is/are objected to.					
8)	Claim(s)	are subject to restriction and/or	election requirement.				
Application Papers							
9)[The specif	ication is objected to by the Examiner	, •				
10)⊠ The drawing(s) filed on <u>10 December 2001</u> is/are: a) accepted or b)⊠ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 l	J.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
			•				
Attachmen	t(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)							
- =	2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)						
	mation Disclor r No(s)/Mail		6) Other:				
S. Potent and T	rademark Office						

Application/Control Number: 10/015,846

Art Unit: 2153

DETAILED ACTION

This office action is a first action on the merits of this application. Claims 1-6 are presented for further examination.

Drawings

The drawings are objected to because the components of figure 1 are not labeled in such a way that one of ordinary skill in the art could determine the functionality or scope of the invention without referring to the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 10/015,846

Art Unit: 2153

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claim 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acharya et al. (Mobility Support for IP over Wireless ATM; hereinafter Acharya) and La Porta et al. (U.S. Patent Number 6,763,007; hereinafter La Porta).
- 2. Regarding claim 1, Acharya discloses a network comprising a plurality of switches which
 - are coupled to fixed terminals or via base stations to mobile terminals (Figure 3);

 However, Acharya fails to disclose a network comprising a plurality of switches which:
 - are combined to respective sub-networks and,
 - contain for a respective connection setup from one terminal to a mobile terminal at least a table which contains an assignment of the home address of a mobile terminal to its visitor's address and to the sub-network that includes the switch assigned to the mobile terminal.

Nevertheless, it was well known in the mobile networking environment at the time of invention to utilize mobile device tracking tables within sub-networks, as evidenced by La Porta. In a related art, La Porta discloses a method for managing mobile client connections within a local subnet (abstract). La Porta discloses classifying a plurality of network switches into sub-networks (domains) (Col 2, lines 31-33). La Porta further discloses a respective connection setup from one terminal to a mobile terminal which contains an assignment of the home address

of a mobile terminal to its visitor's address (routing table entries) (Col 2, lines 44-55). Although La Porta does not explicitly state that a mobile terminal home address is used in the table assignment, when a mobile device is within the sub-domain where it's home agent resides the destination address will be the home address of the agent (Col 9, lines 9-15 or Col 6, line 2 – Col 7 line 5 and Col 7, lines 14-18). La Porta also fails to explicitly state that the assignment made in the router table contains the *sub-network switch assigned to the mobile terminal* however, the addressing scheme disclosed by Acharya includes the sub-network switch assigned to the mobile terminal *within* the home or visitor mobile terminal address (Acharya, Figure 3 – b3.1, switch b3). Thus, in the combined systems of Acharya and La Porta, a router table entry disclosed by La Porta will encompass the sub-network switch assigned to the visitor mobile terminal.

It would have been obvious to one of ordinary skill in the art at the time of invention to include the local mobility scheme disclosed by La Porta within the system disclosed by Acharya in order to substantially minimize notifications to the home agent and the correspondent node (Col 2, line 63- Col 3, line 3).

- 3. Regarding claim 2, La Porta discloses a network as claimed in claim 1, characterized in that a sub-network identification features a sub-network and in that a table in a switch contains an assignment of at least all the switches assigned to a sub-network identification (inherent in order to provide the path routing updates of La Porta, Col 12, line 65 Col 13, line 38).
- 4. Regarding claim 3, Acharya discloses a network as claimed in claim 1, characterized in that the home address is in the form of an identification for a switch assigned to a terminal and an identification for the terminal and in that the visitor's address is formed by a combination of an

Art Unit: 2153

identification for a switch visited at that moment by a mobile terminal and an identification for the mobile terminal (Acharya, Figure 3, b1.1 and b3.1).

- Regarding claim 4, La Porta discloses a network as claimed in claim 1, characterized in that in case of a connection setup between a terminal and a mobile terminal, initially a first provisional connection is set up to a first switch of the home sub-network of the mobile terminal and then a second provisional connection to the home switch of the mobile terminal, in that, if the home address of the mobile terminal does not correspond with its visitor's address at that moment, the second provisional connection to the home switch is cleared and a second provisional connection to the visitor's switch is set up if the mobile terminal is visiting a switch of the home sub-network (A handoff within the sub-network will clear part of a connection link and establish a new link [second provisional connection], Col 13, lines 14-26).
- Regarding claim 5, La Porta discloses that only required assignment tables of switches (routers) (those on the path to the mobile visitor terminal) will be updated via path setup messages (Col 13, lines 21-24) however, it would have been obvious to one of ordinary skill in the art at the time of invention to notify all switches (broadcast) of a visitor assignment update in order to eliminate the added complexity of determining the required switches that must receive the path setup message. Thus, all switches would have a current assignment table for all visitor nodes.
- 7. Regarding claim 6, La Porta discloses a network as claimed in claim 5, characterized in that when a connection is set up between one terminal and a mobile terminal initially a first provisional connection is set up to a first switch of the home sub-network of the mobile terminal and then a second provisional connection is set up to the visitor's switch if the first switch detects

in its visitor's table that the mobile terminal is visiting a switch of the home sub-network (inherent – the connection is directly routed to the current mobile device base station via routing tables [switch visitor assignment tables] when entering the sub-network, Col 7, line 37 – Col 8, line 41).

Conclusion

- 8. The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.
- 9. This office action is made NON-FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Page 7